Application Number: 10/788,886

Docket: 34088/US Reply to Final O.A. of April 6, 2006

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-26. (Cancelled)

27. (New) An implant comprising:

a port structure comprising an outer wall having a substantially uniform outer circumference interrupted by a plurality of regions having areas of a smaller outer circumference, wherein a first region of the plurality of regions comprises one or more discrete tactile surface structures, and a second region of the plurality of regions comprises a plurality of discrete tactile surface structures, wherein each of said discrete tactile surface structures encircles the port structure and are arranged along a length of the port body that comprises at least a portion of an implant area, the plurality of discrete tactile surface structures improving ingrowth characteristics associated with the implant by promoting growth of cellular tissue in at least one direction relative to the surface of the implant;

a holding structure coupled to a first end of the port structure, the holding structure comprising an encircling ring protruding from the first end of the port structure, the encircling ring comprising a plurality of openings spaced around said encircling ring; and

a connecting structure coupled to a second end of the port structure, the connecting structure protruding out of tissue when the implant is inserted into a body and capable of conditionally attaching to a connecting element.

- 28. (New) The implant as set forth in claim 27, wherein the implant comprises a nonbiosorbable material.
- (New) The implant as set forth in claim 28, wherein one of the plurality of regions of 29. tactile surface structure is provided in a region of the implant, wherein, after the implant has been implanted in a body, the surface structure is generally adjacent to the skin.

Application Number: 10/788,886 Reply to Final O.A. of April 6, 2006

30. (New) The implant as set forth in claim 27, wherein the each of the tactile surface structures exhibits a width of approximately 1 to 10 mm.

31. (New) The implant as set forth in claim 27, wherein each of the tactile surface structures exhibits a width of approximately 4 to 5 mm.

Docket: 34088/US

- 32. (New) The implant as set forth in claim 27, wherein one or more of the tactile surface structures comprises a groove.
- 33. (New) The implant as set forth in claim 32, wherein the depth of said at least one or more grooves is approximately 0.1 to 10 times the average width of a type of cell adjacent to the groove after the implant is implanted.
- 34. (New) The implant as set forth in claim 32, wherein the depth of said at least one or more grooves is approximately 0.3 to 5 times the average width of a type of cell adjacent to the groove after the implant is implanted.
- 35. (New) The implant as set forth in claim 32, wherein the depth of the at least one groove is approximately 1 to $10 \mu m$.
- 36. (New) The implant as set forth in claim 32, wherein the depth of the at least one groove is approximately 3 to 4 μ m.
- 37. (New) The implant as set forth in claim 32, wherein the width of the at least one groove is in the range of approximately 1 to 10 μ m.
- 38. (New) The implant as set forth in claim 32, wherein the width of the at least one groove is in the range of approximately 4 to 5 μ m.
- 39. (New) The implant as set forth claim 32, wherein, if more than one groove is provided, the distance of the grooves from each other is approximately 2 to 20 μ m.

Application Number: 10/788,886

Docket: 34088/US Reply to Final O.A. of April 6, 2006

40. (New) The implant as set forth claim 32, wherein, if more than one groove is provided, the distance of the grooves from each other is approximately 10 µm.

- (New) The implant as set forth in 32, wherein the ratio of the width of the groove to the 41. depth of the groove is approximately 0.5 to 2.
- (New) The implant as set forth in claim 27, further comprising a holding structure with 42. at least one passage.
- (New) The implant as set forth in claim 27, wherein the plurality of tactile surface 43. structures promote growth of cellular tissue in a direction parallel to a skin surface into which the implant is inserted.
- 44. (New) The implant as set forth in claim 27, wherein the plurality of tactile surface structures promote growth of cellular tissue by orienting cell growth in a uniform direction relative to the surface structure of the implant.
- 45. (New) A method for producing an implant for implanting in a living body, comprising the step of:

providing a port structure comprising an outer wall having a substantially uniform outer circumference interrupted by a plurality of regions having areas of a smaller outer circumference, wherein a first region of the plurality of regions comprises one or more discrete tactile surface structures, and a second region of the plurality of regions comprises a plurality of discrete tactile surface structures, wherein each of said discrete tactile surface structures encircles the port structure and are arranged along a length of the port body that comprises at least a portion of an implant area, the plurality of discrete tactile surface structures improving ingrowth characteristics associated with the implant by promoting growth of cellular tissue in at least one direction relative to the surface of the implant;

coupling a holding structure to a first end of the port structure, the holding structure comprising an encircling ring protruding from the first end of the port structure, the encircling ring comprising a plurality of openings spaced around said encircling ring; and

Application Number: 10/788,886

Docket: 34088/US Reply to Final O.A. of April 6, 2006

coupling a connecting structure to a second end of the port structure, the connecting structure protruding out of tissue when the implant is inserted into a body and capable of conditionally attaching to a connecting element

(New) The method as set forth in claim 45, wherein the plurality of tactile surface 46. structures are provided by turning a groove.

- (New) The method as set forth in claim 45, wherein the plurality of tactile surface 47. structures are provided by etching.
- (New) The method set forth in claim 45, wherein the plurality of tactile surface 48. structures promote growth of cellular tissue in a direction parallel to a skin surface into which the implant is inserted.
 - (New) The method set forth in claim 45, wherein the plurality of tactile surface 49. structures promote growth of cellular tissue by orienting cell growth in a uniform direction relative to the surface structure of the implant.